



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,749	01/10/2005	Gerhard Gumpoltsberger	ZAHFRI P712US	2606
20210	7590	08/31/2006	EXAMINER	
DAVIS & BUJOLD, P.L.L.C. 112 PLEASANT STREET CONCORD, NH 03301			YOUNG, EDWIN	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/520,749	Applicant(s) GUMPOLTSBERGER, GERHARD	
	Examiner Edwin A. Young	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-44 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 23-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/10/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. This is the first action on the merits for application 1052079. Claims 23-44 are pending in this application.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/EP03/07243, filed on 7/07/2003.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 1/10/2005 has been considered by the examiner.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the free wheels of claims 28 and 29, the axle differential and inter-axle differential of claim 31, the driving motor and coupling element of claim 32, the external starting element, crankshaft and engine of claim 34, the torsional vibration damper and engine of claim 37, the wear-free brake of claim 38, the auxiliary drive of claim 39, and the electric machine of claim 44 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

Art Unit: 3681

prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claim 1 is objected to because of the following informalities: line 10, "is permanent" should be "is *in* permanent" and line 20, "means the a" should be "means *of* a". Appropriate correction is required.
6. Claim 28 is objected to because of the following informalities: lines 1-2, "additional free wheels" should be changed to "free wheels." Appropriate correction is required.
7. Claim 29 is objected to because of the following informalities: line 2, "theat" should be "the at." Appropriate correction is required.

Art Unit: 3681

8. Claim 30 is objected to because of the following informalities: lines 1-2, "input and output" should be changed to "input **shaft** and output **shaft**." Appropriate correction is required.

9. Claim 36 is objected to because of the following informalities: line 2, "as switch" should be "as a switch." Appropriate correction is required.

10. Claim 40 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 40 recites that an auxiliary drive can be arranged on the input shaft or output shaft, which has already been stated in parent claim 39.

11. Claim 44 is objected to because of the following informalities: line 2, "as a auxiliary" should be "as **an** auxiliary." Appropriate correction is required.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 23-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23

- The phrase "in particular an" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).
- "An input shaft" of line 2 and "an output shaft" of lines 2-3 appear to be included in the "at least seven rotational shafts" of line 4. Also, the "first, second and third spider" of line 3 and "a planet carrier" of lines 10 and 11 appear to be a double inclusion. Applicant may not use two different terms for the same part in the claims. Furthermore, applicant may not rely on reference numerals from a drawing to delineate the meets and bounds of his claimed invention.
- Lines 17-18 recite the limitation, "the third shaft can be coupled to the housing by means of a third brake" and lines 19-20 recite the limitation, "the fifth shaft can be coupled to the housing by means of a third brake." It appears from the specification and the drawings that the third shaft is coupled to the housing by a **first** brake and not the same third brake that the fifth shaft is coupled to the housing with.

Claim 26

- It is unclear from the disclosure as to the meaning of the phrases "minus planetary gear sets" on line 3 and "plus planetary gear set" on line 4, rendering the claim indefinite.

Claim 28-29

- Lines 1-2 of claim 28 recite the limitation “additional free wheels can be used in every suitable position” and lines 1-3 of claim 29 recite the limitation “the free wheels are provided between the at least seven rotatable shafts and the housing.” It is unclear how the claimed additional free wheels are interconnected in the claimed multi-step transmission.

Claim 31

- Lines 1-3 recite the limitation, “wherein one or more of an axle differential and an inter-axle differential is arranged on one of the input side or the output side.” It is unclear how the claimed axle differential and inter-axle differential are interconnected in the claimed multi-step transmission.

Claim 34

- Lines 1-4 recite the limitation, “wherein an external starting element is arranged behind the transmission in a direction of power flow, while the input shaft is fixedly connected to a crankshaft of the engine.” It is unclear how the claimed external starting element is inter-connectively arranged in the claimed multi-step transmission.
- Claim 34 recites the limitation “the engine” in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 36

- Claim 36 recites the limitation “the brake” in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 37

- Lines 1-2 recite the limitation, “wherein a torsional vibration damper can be arranged between an engine and the transmission.” It is unclear how the claimed torsion vibration damper is inter-connectively arranged in the claimed multi-step transmission.

Claim 38

- Lines 1-2 recite the limitation, “wherein a wear-free brake can be arranged on each shaft.” It is unclear how the claimed wear-free brake is inter-connectively arranged in the claimed multi-step transmission.

Claims 39-40

- Lines 1-2 of claim 39 recite the limitation, “wherein an auxiliary drive can be arranged on each shaft.” It is unclear how the claimed auxiliary drive is inter-connectively arranged in the claimed multi-step transmission.

Allowable Subject Matter

14. Claim 23 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

15. Claims 24-44 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- ASADA (US 5,049,116) teaches a multi-step transmission, as shown in Figs. 1A and 2A.
- ASADA (JP402026352A) teaches a multi-step transmission, as shown in Fig. 1.
- ZIEMER (US 7,018,319) teaches a multi-step transmission, as shown in Figs. 4A, 10A, and 14A.
- USORO et al. (US 6,669,597) teaches a multi-step transmission, as shown in Fig. 8A.
- TABATA et al. (US 2003/0083174) teaches a multi-step transmission, as shown in Fig. 1A.


17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. Young whose telephone number is 571-272-4781. The examiner can normally be reached on M-F 8-3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EAY


SHERRY ESTREMSKY
PRIMARY EXAMINER
AU3681 8-29-06